

### Data Types

|            |                       |
|------------|-----------------------|
| Integer    | 10, -20               |
| Float      | 3.7, -1.4             |
| String     | "abc", "hello!"       |
| Boolean    | True, False           |
| List       | [ value, ... ]        |
| Tuple      | ( value, ... )        |
| Dictionary | { key: value, ... }   |
| Set        | { value, value, ... } |

### Arithmetic Comparisons

|            |                       |
|------------|-----------------------|
| $x < y$    | Less Than             |
| $x > y$    | Greater Than          |
| $x \leq y$ | Less Than or Equal    |
| $x \geq y$ | Greater Than or Equal |
| $x == y$   | Equal                 |
| $x != y$   | Not Equal             |

### Statements

|                   |                                  |
|-------------------|----------------------------------|
| If Statement      | if (expression):<br>statements   |
| Else If Statement | elif (expression):<br>statements |
| Else Statement    | else:<br>statements              |

### Loop

|                                           |                                                                                      |
|-------------------------------------------|--------------------------------------------------------------------------------------|
| While Loop                                | while (expression):<br>statements                                                    |
| For Loop<br>(Iterating over a collection) | for item in collection:<br>statements                                                |
| For Loop (Counting)                       | for i in range(start, end, step):<br>statements<br># (start is included; end is not) |

### Function Definitions

|                                                 |                                                                     |
|-------------------------------------------------|---------------------------------------------------------------------|
| Function return value<br>with parameters        | def name(parameter1, par2, ...):<br>statements<br>return expression |
| Function return value<br>without parameters     | def name():<br>statements<br>return expression                      |
| Function non-return value<br>with parameters    | def name(parameter1, par2, ...):<br>statements                      |
| Function non-return value<br>without parameters | def name():<br>statements                                           |

### Boolean Logic Operators

|                    |                   |       |
|--------------------|-------------------|-------|
| $x \text{ and } y$ | $x \text{ or } y$ | not x |
|--------------------|-------------------|-------|

### Arithmetic Operators

|                |                |
|----------------|----------------|
| $x + y$        | Addition       |
| $x - y$        | Subtraction    |
| $x * y$        | Multiplication |
| $x / y$        | Division       |
| $x \% y$       | Modulus        |
| $x // y$       | Floor Division |
| $x ** y$       | Exponentiation |
| x operators= y | e.g.: $x += 1$ |

### Input/Output

|        |         |
|--------|---------|
| Input  | input() |
| Output | print() |

### Conversion Functions

|             |                                |
|-------------|--------------------------------|
| int(expr)   | Converts expression to integer |
| float(expr) | Converts expression to float   |
| str(expr)   | Converts expression to string  |



By Sin Hong

[cheatography.com/sin-hong/](https://cheatography.com/sin-hong/)

Not published yet.

Last updated 8th October, 2025.

Page 1 of 2.

Sponsored by [ApolloPad.com](https://apollopad.com)

Everyone has a novel in them. Finish Yours!

<https://apollopad.com>

### String / List / Tuple Operations

|                             |                                                    |
|-----------------------------|----------------------------------------------------|
| <code>len(s)</code>         | Length of s                                        |
| <code>s[i]</code>           | ith item in s (0-based)                            |
| <code>s[start : end]</code> | Slice of s from start (included) to end (excluded) |
| <code>x in s</code>         | True if x is contained in s                        |
| <code>x not in s</code>     | True if x is not contained in s                    |
| <code>s + t</code>          | The concatenation of s with t                      |
| <code>s * n</code>          | n copies of s concatenated                         |

### Reference

|              |                           |
|--------------|---------------------------|
| W3Schools    | <a href="#">W3Schools</a> |
| Cheatography | <a href="#">Python</a>    |

### Group Members of Team 7

| Full name          | ID         |
|--------------------|------------|
| Sin Hong           | IDTB110277 |
| Oeng Vengku        | IDTB110346 |
| Phoeurn Rozariya   | IDTB110147 |
| Rous Sovann Makara | IDTB110159 |



By Sin Hong

[cheatography.com/sin-hong/](https://cheatography.com/sin-hong/)

Not published yet.

Last updated 8th October, 2025.

Page 2 of 2.

Sponsored by [ApolloPad.com](#)

Everyone has a novel in them. Finish Yours!

<https://apollopad.com>